108 PROSECUTION AND PROGRESS

108.01 SUBLETTING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the Contract or Contracts or any portion thereof, or of the right, title, or interest therein, without the consent of the Contracting Officer. If such consent is given, the Contractor will be permitted to sublet a portion of the work. For Federal-Aid projects, the Contractor shall perform with his own organization, work amounting to not less than 30 percent of the total contract cost, unless a different percentage is specified in the contract. Any items designated in the contract as "Specialty Items" may be performed by subcontract and the cost of any such specialty item may be deducted from the total cost before computing the amount of work required to be performed by the Contractor's own organization. No subcontracts, or transfer of contract shall relieve the Contractor of his liability under the contract and bonds.

The request to the Contracting Officer for subcontracting approval shall contain the following information:

- **a.** Subcontractor's name, address, telephone number and Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - **b.** Estimated dollar amount of the subcontract.
 - **c.** Estimated starting and completion dates of the subcontract.

When specifically required in the contract proposal the prime Contractor shall award at least 50 percent of his subcontracts to certified minority business enterprises; bid documents will contain a certification form to be signed by bidders to this effect.

108.02 NOTICE TO PROCEED

The Contractor shall start work on the date specified in a written Notice to Proceed issued by the Contracting Officer, and shall complete the work within the period specified in the Special Provisions.

108.03 CONSTRUCTION SCHEDULING

Prior to commencing any work, the Contractor shall submit his construction schedule to the Engineer for approval.

(A) GENERAL. Sequence of operations and dates for all major stages of work shall be shown on the schedule. Work under pay items shall not commence until schedule is approved. The Contractor shall regulate his operations, plant, work shifts and work force to maintain the approved schedule.

Any time the Contractor falls more than 5 percent, or 4 weeks, whichever is the longer time, behind the approved schedule, he shall promptly upon written notice from the Engineer increase his work force, equipment and working hours in order to put the project on schedule. For delays or portions of delays for which the Contractor is responsible, no payment will be made for increase in work force equipment and working hours needed to put the project on schedule.

- **(B) CPM SCHEDULING.** When required by the special provisions the progress schedule shall be based on CPM scheduling and shall include the following:
- 1. Site organization plan showing locations of administrative facilities, storage and parking areas, traffic flow scheme within project site, site ingress and egress, sanitary facilities, maintenance areas, temporary utility connections, and any other information considered appropriate for proper site management.
 - 2. Schedule showing sequence and timing of first month's operations.
- **3.** Within 20 consecutive calendar days after notice to proceed date, a CPM Network Diagram similar to that described in the Associated General Contractors' book "CPM In Construction Manual for General Contractors." The Arrow Diagram shall contain a separate and distinct activity arrow designation for each activity of work. Items shown in the Pay Item Schedule will not necessarily be considered activities. Each activity arrow shall have a notation including a brief work description and a duration estimate in working days. Inter-dependency relationship of all activities shall be shown. At all times, sequence of work shall take into consideration provisions for Maintenance of Highway Traffic.

The schedule for Arrow Diagram Activities shall indicate:

- a. Status of each activity on the Critical Path;
- **b.** Earliest starting date for each activity;
- **c.** Earliest finishing date for each activity;
- **d.** Latest starting date for each activity;
- e. Latest finishing date for each activity;
- **f.** Amount of float time available.
- **4.** The Contractor shall submit a continuous resource analysis indicating the minimum resources required (i.e., man-power for each trade, equipment, etc.) for each critical path activity shown on the CPM schedule.

Within 7 consecutive calendar days after the Arrow Diagram has been returned to him, the Contractor shall revise as requested and resubmit the Arrow Diagram to the Engineer for approval. The Contractor shall use the approved Arrow Diagram for all project scheduling and shall submit to the Engineer 5 copies each of the approved Arrow Diagram and work schedule.

The schedule shall be regularly monitored by the Contractor so as to produce revised work schedules bi-weekly to reflect activities added, deleted, changes, started and completed.

If the contract work falls more than 5 percent or 4 weeks, whichever is longer, behind the approved schedule and when directed by the Engineer, the Contractor shall produce and submit a revised Arrow Diagram and resource analysis.

108.04 LIMITATION OF OPERATIONS

The Contractor shall conduct the work at all times in such a manner and in such sequence as will assure the least interference with traffic. He shall have due regard to the location of detours and to the provisions for handling traffic. The Engineer may require the Contractor to finish a section on which work is in progress before work is started on any additional sections if the opening of such section is essential to public convenience.

108.05 METHODS AND EQUIPMENT

All equipment necessary for the completion of the work shall be of sufficient size in first-class working condition and must have been inspected and approved by the Engineer before that portion of the construction on which the equipment is to be used will be permitted to begin. The equipment shall be maintained in a first-class operating condition throughout its use on the project for which it is approved.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than specified in the contract, he may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove the deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the construction items involved nor in contract time as a result of authorizing a change in methods or equipment under these provisions.

108.06 DETERMINATION OF CONTRACT TIME AND PARTIAL SUSPENSION

(A) CONTRACT TIME. The number of days allowed for completion of the work included in the contract will be stated in the contract documents and will be known as contract time.

When the contract time is on a calendar day basis, it shall be counted from the effective date on the Notice to Proceed and shall include all working days and non-working days, including Sundays and Holidays.

All calendar days elapsing between the effective dates of any orders of the Contracting Officer to suspend work and to resume work for suspensions not the fault of the Contractor shall be excluded.

Adjustments will also be made for periods of partial suspensions as defined below.

(B) PARTIAL SUSPENSION. The performance of work under the contract may, by written order of the Contracting Officer, be partially suspended during the period from December 1st to April 1st inclusive, or during such other periods as the Contracting Officer may determine necessary due to weather, soil or other conditions considered unsuitable for prosecution of the work. Suspension of work on some but not all items of work shall be considered partial suspension.

During periods of partial suspension, the number of calendar days to be charged as contract time shall

be computed by multiplying the number of calendar days of original contract time by the ratio of the amount earned during the period of partial suspension to the original contract amount. In no case shall the number of calendar days charged as contract time for a period of partial suspension exceed the total elapsed time of the partial suspension.

(C) UTILITY DELAYS. The Contractor shall consider the location of existing utilities in determining contract time. The Contractor is warned that delays of a minor nature, encountered through required utility adjustments by others or imprecise utility location information, have been considered, and delays resulting therefrom may not serve as a basis for time extensions.

108.07 FAILURE TO COMPLETE ON TIME

For each calendar day that contract work remains uncompleted after expiration of the contract time or main part thereof, the sum in the table below will be deducted as liquidated damages from any money due the Contractor. The Contractor's operations after expiration of construction completion time as extended will in no way waive the District's rights under the contract.

Original Contract Total					
More Than		to and Incl.		Calendar Day Charge	
\$ 0	\$	100,000	\$	200,	00
	100,000	500	0,000		400.00
	500,000	1,000	1,000,000 2,000,000		650.00
	1,000,000	2,00			
	2,000,000	4,00	00,000	950,00	
	4,000,000	7,00	00,000	1,100.00	
	7,000,000	10,0	000,000	1,350.00	
	10,000,000	20,000	0,000		1,500.00

108.08 PROGRESS PHOTOGRAPHS

20,000,000

Suitable photographs shall be taken by the Contractor at each project site. View locations will be designated. Required number of photographs will be specified in the Special Provisions.

1,700.00

Photographs shall be 8 x 10 inches, mounted on linen, with an inch flap at the left side for binding. They shall be properly identified as to project and view taken, date taken, and numbered consecutively in the order taken starting with No. 1. This information shall be placed in the bottom margin. Three copies and a negative of each view shall be furnished the Engineer as soon as practicable.

Sample progress photographs are available at the Construction Office of the Department of Public Works.

All expenses connected with photographs shall be at the Contractor expense, unless otherwise specified in the contract.

108.09 DIMENSIONS OF EXISTING FACILITIES

Dimensions and locations of existing facilities are not necessarily exact. Where installation or connection of any part of the work to existing facilities are required, the Contractor shall verify such dimensions and locations in the field before the fabrication of any material or equipment which is dependent on the correctness of such information.

108.10 ADVERSE WEATHER PRECAUTIONS

During adverse weather, the Contractor shall take necessary precautions so that the work may progress properly and is satisfactory in all respects.

During hot weather, and cold weather below 40 deg. F, any part of the work that is temperature dependent shall be properly protected.

108.11 PRECONSTRUCTION SURVEY

Prior to starting any work, the Contractor shall make a detailed inspection of buildings, structures, roadways, sidewalks, retaining walls, landscaping, and related surface improvements adjacent to and in the vicinity of the proposed work, wherever located. The inspection shall include notes, measurements, and a video cassette tape (Beta or VHS format 1/2 inch tape), with audio sound track, of all facilities prior to the start of construction. The audio description of the inspection shall include the date, time, weather conditions, address/stationing/location, brief description of the facility, and description of physical conditions encountered.

Two copies of all notes, measurements, video tapes, reports, and data shall be submitted to the Engineer, accompanied by a completed Department of Public Works' standard transmittal form, as soon as these records are complete and prior to start of any construction activity. Progress payments will not be made until this requirement is met.

No additional compensation over and above that reflected in the Schedule of Prices will be allowed for complying with this provision.